

In the Title

Please replace the title with the following new title:

Data Packet Routing For Mobile Networks

In the Claims

Claims 1-18 were previously cancelled.

19. Cancelled.

20. Cancelled.

¹⁵ 21. (Twice amended) The communication system of claim ¹⁴ 4/20, wherein the at least one messaging handling node routes the data packet based on the entire IP address of the mobile receiver destination code.

J¹ ¹⁶ 22. (Twice amended) The communication system of claim ¹⁴ 4/20 wherein the IP address of the mobile receiver logic destination code is a globally unique IP address.

[23. Cancelled.

¹ 24. (Amended) In a communications node of a system, a method for routing data packets comprising:

receiving a first data packet, the data packet including a ~~unique logical code~~ a first internet protocol (IP) address for identifying a mobile source of the data packet independently of the physical media over which the mobile source is communicating;

storing the first IP address ~~logical-code~~ and associating it with a physical media path from which the first data packet was received;

receiving a second data packet, the second data packet including the ~~logical-code~~ first IP address for as identifying the mobile source as a destination of the second data packet and a second IP address for identifying the sender of the data packet;

looking up the physical media path associated with the first IP address ~~logical-code~~; and

forwarding the second data packet based on the stored physical media path.

25. (Amended) The method of Claim 24 wherein ~~the logic-code~~ first IP address uniquely identifies the mobile source for routing data packets within public; interconnected networks.

26. Cancelled.

27. (Amended) In a communications node of a system of interconnected networks, a method for routing data packets comprising:

storing a unique internet protocol (IP) address for identifying a mobile receiver of a data packet anywhere within the interconnected networks, independently of the physical media over which the mobile receiver is communicating;

associating the unique IP address with a physical media path;

receiving a data packet having a source IP address identifying a sender of the data packet and the mobile receiver's IP address identifying the mobile receiver as a destination for the data packet ~~by the unique address;~~

looking up the physical media path along which to forward the data packet using the entire mobile receiver's IP address ~~unique address~~ contained in the data packet; and

forwarding the data packet according to the physical media path.

28. Cancelled.

29-31. Previously cancelled.

6/ 32. (Amended) A communications node for routing data packets, each such data packet including a ~~logical-code~~ first internet protocol (IP) address for uniquely identifying a mobile source of each such data packet independently of the physical media over which the mobile source is communicating within the interconnected networks the communications node including a packet routing device for routing the data packets and a data structure stored in a memory for associating a ~~logical-code~~ the first IP address of a first data packet sent by a mobile source with a physical media path identifier identifying the physical media path from which the first data packet was received; wherein, when the communications node receives a second data packet that includes the first IP address ~~logical-code~~ as identifying the mobile source as a destination of the second data packet, and a second IP address for identifying a source of the second data packet, the packet routing device looks up in the data structure the physical media path identifier associated with the ~~logical-code~~ first IP address and forwards the second data packet to the physical media path identified by the physical media path identifier.

7/ 33. (Amended) The communication system of Claim 32 wherein the first IP address ~~logic~~ ~~code~~ is a globally unique identifier.

34. Cancelled.

9/ 35. (Amended) A communications node for routing data packets, each such data packet including a source internet protocol (IP) address ~~logical-code~~ for uniquely identifying a source of each

such data packet independently of the physical media over which the source is communicating with the interconnected networks, and a destination IP address for identifying a destination of the data packet, the communications node including a packet routing device and a data structure stored in a memory for storing the source IP address ~~logical code~~ of a first data packet sent by a mobile source and associating it with a physical media path identifier to which the first data packet was forwarded by the communications node; wherein, when the communications node receives a second data packet, which includes the first source IP address of the first data packet ~~logical code~~ as identifying the source of the second data packet, the packet routing device looks up in the data structure the physical media path identifier of the node associated with the ~~logical code~~ the source IP address and forwards the second data packet ~~to the node~~.

¹⁰
~~36.~~ (Amended) The communication system of Claim ⁹~~35~~ wherein the first IP address ~~logic code~~ is a globally unique identifier.

CONT
J'
[37. Cancelled.

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~~38.~~ (Amended) A communications node for connecting a plurality of networks comprising:
a packet routing device for routing data packets, each of the data packets containing a source IP address identifying a source of the data packet and a destination IP address identifying a destination of the packet, and

a data structure for storing a ~~logical~~ first internet protocol (IP) address that uniquely identifies a host within the plurality of networks independently of physical media on which the host is communicating, the data structure associating the ~~logical~~ first IP address with routing information for forwarding data packets containing the first IP address as the destination IP address ~~logical addresses~~;

wherein the packet routing device includes a circuit for looking up routing information in the data structure for forwarding ~~the~~ a data packet to the host using the entire ~~logical~~ first IP address contained in the data packet.

¹²
~~39.~~ (Previously Added) The communications network of Claim ¹¹~~38~~, wherein the circuit for looking up includes a circuit for determining an index into the table.

[40. Cancelled.

¹⁴
~~41.~~ (New) A communication system comprising a message handling node for routing a data packet between two or more networks, the data packet destined for a mobile receiver having an internet protocol (IP) address for identifying the mobile receiver to each of the two or more networks independently of the physical media path over which the mobile receive is communicating; the data packet including a source IP address for identifying a sender of the data packet and the mobile receiver's IP address as a destination IP address; the message handling node storing a data structure associating routing information for the IP address of the mobile receiver and routing the data packet based on the routing information for the mobile receiver's IP address.

¹⁷
~~42.~~ (New) The communication system of claim ¹⁴~~41~~, wherein the message handling node includes storage of source IP address filtering information and circuitry for filtering the data packet in response to the source filtering information stored for the source IP address of the data packet.

³
~~43.~~ (New) The method of claim ¹~~24~~, further comprising, looking up filtering information for second IP address; and filtering the data packet based on the filtering information.

⁵/₄₄ (New) The method of claim ⁴/₂₇, further comprising, looking up filtering information for source IP address; and filtering the data packet based on the filtering information.

⁸/₄₅ (New) The communications node of claim ⁶/₃₂, wherein the communications node stores source IP address filtering information and includes circuitry for filtering the data packet in response to the source filtering information stored for the second IP address.

¹³/₄₆ (New) The communications node of claim ¹¹/₃₈, wherein the communications node stores source filtering information, and includes circuitry for looking up source filtering information using the source IP address of each data packet and filtering the data packet.
